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ABSTRACT

The relevancy of research and the subsequent development of research skills in counselor education training has been the subject of considerable debate. To assess the status of research in graduate programs, research productivity was reviewed among 78 Council for Accreditation of Counseling and Related Educational Programs (CACREP) offering master's or doctoral degrees in a variety of areas. This paper reports the results of that review. Program analysis was conducted for the years 1974-1992. Separate assessments were made based on all departmental publications listed in the Social Sciences Citation Index (SSCI) and in the 14 journals of the American Counseling Association (ACA). Strong relations were found between overall productivity as indexed in SSCI and productivity in the ACA journals among the departments included in the assessment. The level of terminal degree offered by a department and the number of first-authored publications produced by graduate students explained significant amounts of variability in the productivity measures. A comparison of pre- versus post-accreditation productivity revealed a significant increase in productivity subsequent to accreditation. The relative utility of such information for the assessment and selection of graduate programs in counseling is discussed. (Author/RJM)

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Research Productivity in CACREP Accredited Programs

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Running head: RESEARCH PRODUCTIVITY IN CACREP PROGRAMS

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Abstract

Research productivity was reviewed among 78 CACREP accredited programs that offer masters or doctoral degrees in a variety of areas (counselor education, counseling psychology, etc.). This analysis was conducted for the years 1974-1992. Separate assessments were made based on all departmental publications listed in the Social Sciences Citation Index [(SSCI)] (1974-1992) and publication in the 14 journals of the American Counseling Association (ACA) for the years 1974-1992. Strong relations were found between overall productivity as indexed in SSCI and productivity in the ACA journals among the departments included in the assessment. The level of terminal degree offered by a department and the number of first-authored publications produced by graduate students explained significant amounts of variability in the productivity measures. Finally, a comparison of pre- versus post-accreditation productivity, based on the SSCI data, revealed a significant increase in productivity subsequent to accreditation. The relative utility of such information for the assessment and selection of graduate programs in counseling is discussed.

Research Productivity in CACREP Accredited Programs

The relevancy of research and subsequent development of research skills in counselor education training has been the subject of considerable debate (Anderson & Heppner, 1986; Claiborn, 1987; Frank, 1984; Goodyear & Benton, 1986; Howard, 1984; Polkinghorne, 1983). In recent years several factors, adoption of the scientist-practitioner model (Anderson & Heppner, 1986; Claiborn, 1987; Heppner, Gelso, & Dooliver, 1987), reduction or elimination of thesis requirements for master's level students, and increased course requirements (Engels, 1991) have relegated traditional research training to a minor role in the education of counselors (Heppner, Kivlighan, & Wampold, 1992). In fact, many counselor's-in-training fail to appreciate the significant role that research has played in the evolution of their field (Heppner & Anderson, 1985). Inextricably linked to this lack of comprehension is the modeling that faculty and clinical supervisors provide for students. As Strupp (1981), who believed a decade ago that a major problem in the development of mental health professionals was an inadequate understanding of the scientific process, asks, "How many of our...clinical supervisors take these matters seriously? How many supervisors are intimately familiar with the frontiers of current research?" (p. 217-218).

Ironically, the same year that the Strupp (1981) article appeared The Council for Accreditation of Counseling and Related Educational Programs (CACREP) was independently incorporated. CACREP was, in part, a response to the growing concern among regulatory agencies about the competency and training of counselors. CACREP's mission has been to advance the counseling profession through graduate education standards which promote quality educational programs (Sweeney, 1992).

Since its incorporation, considerable debate about CACREP and its impact on the counseling profession has taken place (Bobby & Kantor, 1992; Engels, 1991; Sweeney, 1992; Weinrach, 1991). Articles examining the need for accreditation, increases in program requirements (Cecil & Comas, 1986; Vacc, 1992), relevance of CACREP standards (Vacc, 1992) charges of elitism (McClure & Russo, 1995; Weinrach, 1991), and others investigating the impact of CACREP on various facets

of counselor education programs (Bobby & Kandor, 1992; Engels, 1991) have appeared.

However, one issue that has been overlooked in the debate has been the impact of CACREP on graduate research training and research productivity among faculty at CACREP approved programs. While CACREP has adopted the research training goals espoused by the American Counseling Association in their Standards for the Preparation of Counselors little mention of these expectations appears in their own accreditation manual. In addition, beyond the reporting of faculty research and publication efforts during the accreditation process CACREP does not directly express a desire for faculty, in their approved programs, to be active, publishing scholars. This is of particular importance today, because not only has credentialing and licensure become essential for the survival of the counseling profession but increasingly demands for the formal assessment of quality and accountability is now becoming a major undertaking at most universities (El-Khawas, 1987; Ewell, 1985).

Documentation of outcomes in the areas of teaching, research, and service have been mandated by state and regional accreditation agencies (cf. Southern Association of Colleges and Schools [SACS], 1987). The development of outcome assessment plans and their implementation, while providing increased accountability to the public, will also provide a means for evaluating whether or not goals are being attained in specific academic programs and the relative quality of instruction and scholarship at various institutions.

Within the field of counseling, the CACREP accreditation process provides information on the quality of master's-level and doctoral programs in counseling and counselor education. These programs provide graduate training to thousands of students each year by preparing students for jobs requiring the degree within counseling or related fields and, in master's level programs, by preparing them for graduate training at the doctoral level. The primary purpose of this study was to provide information regarding one aspect of "quality" among faculty at CACREP accredited programs: research productivity.

Two approaches have been used to examine the quality of academic programs: reputational ratings and research productivity assessments. Evaluations of

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program quality based totally, or in part, on reputational ratings (Cartter, 1966; Jones, Lindzey, & Coggeshall, 1982; Roose & Andersen, 1970) have typically asked for impressions regarding the scholarly quality of a program's faculty. Problems with relying on this type of subjective evaluation as the sole criterion for determining quality have been delineated elsewhere (Cox & Catt, 1977). As an alternative, assessments of program quality based on research productivity have become a more objective counterpart to the traditional subjective evaluation procedures (Cox & Catt, 1977; Howard, Cole, & Maxwell, 1987).

Such assessments have been conducted separately for counseling psychology (Delgado & Howard, 1994; Howard, 1983; Howard & Curtin, 1993), industrial/organizational psychology (DeMeuse, 1987; Howard, Maxwell, Berra, & Sternitzke, 1985), quantitative psychology (Maxwell & Howard, 1986), social psychology (Gordon & Smith, 1989, Gordon & Vicari, 1992) and for terminal master's programs in psychology (Gordon, 1990). However, with the exception of the study by Gordon (1990), the majority of research published in the journals examined in the studies cited above has come from doctoral level psychology departments. In addition, previous productivity studies have not distinguished between research produced by different departments within the same institution. For example, with the exception of Gordon (1990), the unit of analysis in each of the productivity studies listed above is the institution itself, not a specific department. By restricting the present assessment to specific departments offering CACREP accredited programs, the research productivity of faculty housed in these specific departments that offer doctoral and terminal master's degrees in educational psychology, counseling psychology, and counselor education can be measured more accurately. Such information will allow faculty at these institutions to view their program's relative level of research productivity and should also provide prospective students with data regarding the emphasis placed on research among various programs in counseling and counselor education.

An additional factor that distinguishes the present investigation from prior productivity assessments involves the attempt to weight productivity for

each program by the average number of full-time equivalent faculty members housed in the department across the years examined. This form of weighting is perhaps less important in studies that compare productivity across programs that vary less in number of faculty or where the unit of analysis is actually the institution and not a specific department. However, given the general disparity in size between departments that offer doctoral versus terminal master's degrees, and the inclusion of both types of departments in the present investigation, we felt it imperative to weight research productivity accordingly.

Method

Program Selection Criteria

The 78 departments included in the study were selected based on their CACREP accreditation status as of 1992 (CACREP, 1992). The departments represent a rather wide variety of programs, however the majority of departments have the title Counseling Psychology or Counselor Education. The departments included in the sample also represent a mixture of comprehensive level and doctoral granting institutions. Given this difference and its relationship to number of departmental faculty, the number of full-time departmental faculty was taken into consideration in terms of creating an appropriate weighting factor regarding research productivity. The choice of starting date for the assessment time period (1974-1992) was based on the use of the PsycLit database available on CD-ROM that includes entries in the ACA journals from the year 1974 to present. We also believed that this would provide an appropriate time period for pre- versus post-accreditation comparisons given that the earliest accreditations took place in 1979 and 1980.

Productivity Measures

Social Sciences Citation Index (SSCI). The corporate source index in SSCI lists first-authored publications by institution and departmental affiliation within institution. However, when an affiliation is not noted (e.g., no mention of departmental affiliation in the author notes of an article), the publication is listed in a general section of the corporate source listing for that institution. Subsequent to assessment of each corporate source volume for the

years 1974-1992, the general section of each volume was checked and entries were counted as target department publications if the author had appeared in the target department listings.

Compounding the problem of appropriate assignment of productivity credit, was the wide variety of target department names and the strong tendency to change the name of the department, among the 78 programs included in the study. In fact, the 1992 list of CACREP accredited programs include no less than 38 different target department names, with "Counselor Education" and "Counseling Psychology" being the most common departmental titles.

To ascertain the correct name of the target departments and the number of full-time faculty across the productivity period (1974-1992), a brief survey instrument was mailed to each of the 78 departments. The questionnaire asked for information on the number of full-time departmental faculty across the years 1974-1977, 1978-1981, 1982-1985, 1986-1989, and 1990-present. The survey also asked respondents to list the inception date of the department and any departmental name changes that had taken place along with the year the name change took place. Given the importance of the foregoing information, the surveys were mailed up to four times, to departments that had previously failed to respond. This resulted in a return rate of 74% (58 of 78 departments). For the remaining 20 departments, relevant information regarding number of full-time faculty was subsequently gathered via current college catalogs, section III of the 1993 edition of Graduate Study in Psychology and Associated Fields (APA, 1993), or by telephone. The surveys returned indicated 68 name changes among the 58 departments during the years 1974-1992. The number of full-time faculty housed in a department was calculated by averaging the responses from the five time periods listed above. This number was subsequently used as a weighting factor for the productivity measures.

The corporate source index of SSCI distinguishes between first authored publications in terms of the nature of the publication (e.g., article, book review, brief report, etc.). For the present investigation first-authored articles were weighted 1.00, and reviews and brief research reports were weighted .50. Total SSCI productivity scores were based on this weighting.

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PsycLit. All of the journals published by the American Counseling Association (ACA) are included in the PsycLit database. However, only a few entries occur for the Journal of Addictions and Offender Counseling, none of which originate from the set of 78 departments included in the study. Therefore, the PsycLit analysis was based on publications in the following thirteen journals: Counseling and Values, Counselor Education and Supervision, Elementary School Guidance and Counseling, Journal for Specialists in Group Work, Journal of College Student Development, Journal of Counseling and Development, Journal of Employment Counseling, Journal of Multicultural Counseling and Development, Measurement and Evaluation in Counseling and Development, Rehabilitation Counseling Bulletin, The Career Development Quarterly, The Journal of Humanistic Education & Development, and The School Counselor. All name changes for the ACA journals were examined carefully (e.g., Personnel and Guidance Journal to Journal of Counseling and Development and Vocational Guidance Quarterly to The Career Development Quarterly), and the PsycLit database was searched accordingly. The search was limited to the 13 ACA journals listed above across the years 1974-1992 for each of the 78 institutions. Based on this approach, only first-authored publications in this set of journals were included. To provide a more comparable measure to the productivity assessment based on SSCI data, PsycLit productivity credit was also based on first-authored publications as opposed to the productivity formula previously used by Howard et al. (1987).

To determine departmental affiliation, faculty listings from current college catalogs were used to assign the credit appropriately. When names did not appear in these listings, the journal article itself was examined to determine the departmental affiliation of the first author. This assessment revealed that 53% of the entries were from the target departments within the 78 institutions. The remaining entries were divided in the following manner: education departments = 9%; psychology departments = 8%; psychological or counseling centers or clinics = 5%; and miscellaneous = 25%. The vast majority of the miscellaneous entries involved publications by counselors and psychologists in private practice and by faculty in personnel and guidance

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programs, rehabilitation programs, marriage and family programs, sociology, social work, and management. Only a small percentage of the miscellaneous category (approximately 4%), included publications where the departmental affiliation could not be determined. If one includes the miscellaneous entries that involve a departmental affiliation, nearly one third of all entries under a given institution were publications from outside the department of interest. This finding highlights the importance of distinguishing between productivity among different departments within the same institution. Each first-authored entry represented one point of productivity credit.

Coding and Reliability Analysis. One rater coded the SSCI entries for 58 of the institutions and a second rater coded the entries for the remaining 20 schools. Twenty percent of the entries were chosen at random to examine the reliability of the data. The unit of analysis was one year (i.e., all entries within a single year at a given institution had to match for agreement). The results of the reliability analysis revealed an average interrater agreement of .95. Data from all 78 institutions gathered from the PsycInfo database was also checked by a second rater. The unit of analysis was the same as that described above and the interrater agreement was .98.

Results

Composite Productivity Indexes

Examination of the productivity distributions among the 78 institutions for the number of first-authored publications listed in SSCI and the total number of first-authored publications in the 13 ACA journals revealed that both distributions were positively skewed (skewness = 2.16 and 2.54, respectively). A log transformation previously used by Maxwell and Howard (1986) was therefore applied to the data to compute a productivity index. The following formula was used:

$$P_i = \Sigma \underline{z}(\underline{\ln}(X_i+1))/2 \qquad (1)$$

where X_i represents the institution's PsycLit (ACA) productivity score and SSCI productivity score and where $\underline{z}$ and $\underline{\ln}$ represent the standardizing and logarithmic transformations, respectively. An institutions's composite index productivity score was also weighted by the number of full-time departmental

faculty. The P_1 index tends to reward institutions that scored high on both productivity measures. A rank-order listing of the top 25 doctoral granting programs based on productivity in the P_1 index can be found in Table 1 and a similar listing of the top 25 master's level programs can be found in Table 2.

Insert Tables 1 and 2 about here

As would be expected, the rank-order correlations between SSCI productivity and the P_1 composite index and between ACA productivity and the P_1 composite index were both extremely strong, r = .94, τ = .78, and r = .94, τ = .79, respectively. Rank-order correlation coefficients were also computed to examine the relationship between the SSCI productivity rank and ACA productivity rank. This assessment revealed a moderate to strong relationship between the two productivity measures, r = .77 and τ = .57.

In addition, rank-order correlations were also computed for the relationship between first-authored publication in the Journal of Counseling and Development (formerly Personnel and Guidance Journal) and the overall productivity measures. This analysis revealed a relatively high correlation between publication in this journal and overall ACA productivity, r = .79 and τ = .61. The correlation between first-authored publications in the journal and an institution's SSCI rank was somewhat weaker, r = .72 and τ = .54. Interestingly, the journal's rank-order correlation with the P_1 index was also relatively strong, r = .81 and τ = .67.

Regression Analyses

The list of 78 institutions included 41 programs that offered doctoral degrees and 37 programs that offered terminal master's degrees. Based on this distinction and, its typical impact on factors related to research productivity (e.g., teaching load), it was predicted that this factor would be significantly related to research productivity across the various departments. In addition, based on data from Gordon and Smith (1989), we expected the amount of student involvement in the research process (as reflected in student first-authored publications) to be an additional predictor of overall departmental

productivity.

Data gathered via the assignment of departmental affiliation for first-authored publications across the 13 ACA journals were used to examine the number of articles where the first author was a graduate student. The degree variable was dummy coded with master's level degree programs coded as 1 and Ph.D. and Ed.D programs coded as -1. The results of a regression analysis that regressed the composite productivity index (P_1) on the two variables listed above revealed that the degree variable accounted for 28% of the variability in the P_1 measure, F (1, 76) = 30.02, $p < .0001$, and the number of first-authored student publications accounted for an additional 17% of the variance in the composite productivity index, F change (2, 75) = 24.02, $p < .0001$. A similar set of regression analyses were conducted using the individual indexes as the criterion variable. These analyses revealed results that were entirely consistent with those described above.

Given the predictive impact of the student productivity measure, a listing of the 23 institutions that had student first-authored publications in the 13 ACA journals can be found in Table 3. Significant rank-order correlations were

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Insert Table 3 about here

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found between this student-based productivity measure and the overall ACA productivity score, r = .59 and τ = .47. In addition, the number of first authored student publications was significantly related to the institution's SSCI rank, r = .56 and τ = .45, and the composite productivity index (P_1), r = .61 and τ = .49.

Comparison of Productivity Pre- and Post- CACREP Accreditation

Lastly, to examine the impact of CACREP accreditation on the level of research productivity, a comparison of departmental productivity prior to and subsequent to a program's accreditation was conducted. This analysis was based on the SSCI productivity index so as not to restrict productivity to publication in the 13 ACA journals. Date of first accreditation was taken from the

directory of CACREP accredited programs (CACREP, 1992). Given the time span involved (1974-1992), the six programs that received first time accreditation in 1992 were excluded from this analysis.

SSCI productivity credit for journal articles, reviews, and research notes was weighted in the manner previously described and totals were computed for each of the 19 years. A department's pre-accreditation productivity measure was equivalent to the average level of yearly SSCI productivity up to and including the year of accreditation, weighted by the number of faculty. Post-accreditation productivity involved a similar assessment across the years subsequent to accreditation. As was the case with the overall SSCI and PsycLit productivity totals, the distributions of the pre- and post-productivity indices were positively skewed (skewness = 2.83 and 2.37, respectively). Therefore, the log transformation previously used by Maxwell and Howard (1986) was also applied to this data to compute the pre- and post- SSCI productivity indices.

A dependent t-test revealed that departments had a significantly greater number of publications indexed in SSCI in the years subsequent to accreditation (M departmental publications per year per faculty = .19) than in the years prior to accreditation (M departmental publications per year per faculty = .14), t (72) = 3.02, $p < .004$. Given the possibility that a post-productivity score based on a single year of entries in SSCI might produce an unreliable estimate of post-accreditation productivity, an additional analysis that excluded departments with less than three years post-productivity data was conducted. Once again, SSCI productivity was significantly greater after accreditation (M departmental publications per year per faculty = .20) than in the years prior to accreditation (M departmental publications per year per faculty = .15), t (61) = 3.22, $p < .002$.

Discussion

Between 1974-1992 6322 articles were listed in PsycLit for the 13 ACA journals used in this study. Faculty housed in the 78 CACREP-approved programs published 866 (13.7%) of those articles. Moreover, the majority of those articles were published by doctoral granting institutions. So these results are

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not surprising. It appears to confirm that where there is research and publication expectation among faculty and their college or university (e.g., doctoral programs), there are measurable results. The relatively large number of ACA journal publications from other departments and programs at the respective institutions suggests that attempts to restrict such productivity assessments to a specific department may be extremely important.

While target departments at the University of Georgia, University of North Carolina-Chapel Hill, North Carolina State University, and the University of Iowa were ranked at the top, reasons for publication differences among them and other doctoral institutions can only be speculated. These might include fewer tenured faculty, more intramural support (e.g., money, research assistants, lighter teaching loads, etc.) and more extramural assistance in the form of state and federal grants. Among comprehensive institutions college and university expectations for publishing and subsequent promotion and tenure may account for much of the variance. In other instances publication may simply reflect a desire by faculty for professional development. It is interesting to note that when comprehensive and doctoral universities and colleges are combined, four comprehensive universities, James Madison University (10), Fairfield University (19), University of Vermont (22), and Villanova University (24) would rank among the top 25.

Although a significant increase in SSCI productivity was found subsequent to CACREP accreditation, this difference should be interpreted with caution. A wide variety of factors including, the specific faculty housed in a department across the time period of the study could be responsible for the observed difference in the present data. However, it is also possible that accreditation itself may lead to the acquisition of additional resources that, in turn, facilitate research productivity within a department.

Our argument is not so much that publication in and of itself is important but that the academic environment in which it takes place promotes creativity, inquiry, and reflects some regard for the process of scientific investigation. In these institutions, students at best are often active members of a research

team and at worst are aware that their faculty are engaged in research and publication. We suspect that in these latter institutions faculty research and respect for scientific inquiry somehow finds it way into the classroom. One of the very tangible benefits of such training in scientific thinking and research methods is the ability to think critically. For counselors this translates into being able to develop simultaneous hypotheses about client problems, evaluate the effectiveness of interventions, lessen the effect of personal bias, and organize facts into theoretical models (Heppner, Kivlighan, & Wampold, 1992). In addition to making discoveries and furthering knowledge in the counseling field, systematic training in research methodology enhances critical thinking skills. Thus, in those institutions where research is valued and publications result there is increased likelihood that students are being adequately trained in the scientific method.

Publication results reported in SSCI and PsycLit are one tangible measure of academic quality. Faculties at colleges and universities ranked here reflect a commitment to research and publishing as one aspect of their professional development. Students interested in developing research skills might consider an institution's ranking when applying to CACREP-approved graduate schools.

Let us acknowledge that this study by no means captures or is intended to capture the breath of creative activity that may be reflected in counselor education programs throughout the country that are not reported in the PsycLit or SSCI. Nor is our intention to relegate non-CACREP approved programs to a lessor status. Quite simply we were interested in a conducting a preliminary study that reflected one objective measure of quality among faculty at CACREP accredited programs.

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Table 1

SSCI and ACA Productivity Totals and Rankings for 25 Doctoral Program Institutions Based on Mean Standardized Log Score (P_1)

Institution	SSCI		ACA		P_1
	Total	Rank	Total	Rank	Rank
U. of Georgia	120.00	(1)	32.00	(3)	(1)
U. of North Carolina-Chapel Hill	42.00	(3)	24.00	(2)	(2)
North Carolina State U.	45.00	(9)	52.00	(1)	(3)
U. of Iowa	113.00	(4)	49.00	(6)	(4)
U. of Florida	122.00	(7)	73.00	(4)	(5)
U. of New Orleans	47.00	(2)	10.00	(11)	(6)
U. of Oregon	45.00	(5)	15.00	(9)	(7)
Purdue U.	62.50	(10)	33.00	(8)	(8)
Kent State U.	61.00	(14)	31.00	(10)	(9.5)
U. of Wyoming	19.00	(18)	17.00	(7)	(9.5)
U. of North Carolina-Greensboro	23.50	(20.5)	35.00	(5)	(11)
U. of British Columbia	93.50	(15)	42.00	(13)	(12)
U. of Maryland	169.00	(6)	26.00	(22)	(13)
U. of Tennessee-Knoxville	60.00	(8)	13.00	(20)	(14)
Auburn U.	81.50	(11)	24.00	(16)	(15)
Southern Illinois U. - Carbondale	121.50	(17)	47.00	(14)	(16)
U. of South Carolina-Columbia	50.00	(13)	11.00	(24)	(17)
U. of Southern Mississippi	62.00	(16)	13.00	(25)	(18)
Ohio U.	24.00	(22)	16.00	(15)	(19)
U. of Alabama-Tuscaloosa	13.00	(31)	18.00	(12)	(20)
George Washington U.	18.50	(26)	12.00	(18.5)	(21)
U. of Akron	49.50	(12)	5.00	(31.5)	(22)
Idaho State U.	10.00	(27)	7.00	(18.5)	(23)
Northern Illinois U.	38.50	(19)	11.00	(26)	(24)
U. of Virginia	16.00	(30)	15.00	(17)	(25)

Table 2

SSCI and ACA Productivity Totals and Rankings for 25 Master's Level Program Institutions Based on Mean Standardized Log Score (P_1)

Institution	SSCI		ACA		P_1
	Total	Rank	Total	Rank	Rank
James Madison U.	46.00	(1)	10.00	(20)	(1)
Fairfield U.	7.00	(6)	10.00	(10)	(2)
U. of Vermont	8.00	(5)	8.00	(15)	(3)
Villanova U.	19.50	(4)	16.00	(19)	(4)
Pittsburgh State U.	10.50	(2)	5.00	(31)	(5)
U. of Hawaii-Manoa	10.00	(14)	15.00	(22)	(6)
Murray State U.	8.00	(10.5)	7.00	(30)	(7)
U. of Nevada-Las Vegas	20.50	(9)	12.00	(36)	(8)
U. of Northern Iowa	7.50	(10.5)	5.00	(35)	(9)
Western Illinois U.	11.50	(15)	7.00	(44)	(10)
SUNY College at Plattsburgh	5.50	(17)	4.00	(43)	(11)
Oregon State U.	11.00	(13)	4.00	(52)	(12)
Shippensburg U.	7.00	(20)	6.00	(41)	(13)
U. of Scranton	15.50	(3)	.00	(69)	(14)
East Texas State U.	7.50	(24)	9.00	(42)	(15)
Northeast Louisiana U.	2.00	(33)	6.00	(34)	(16)
Wright State U.	20.50	(7)	1.00	(26.5)	(17)
Youngstown State U.	10.50	(8)	1.00	(23.5)	(18)
Northeast Missouri State U.	1.50	(26.5)	2.00	(15)	(19)
SUNY College at Brockport	3.00	(30)	4.00	(17)	(20)
California State U.-Sacramento	7.50	(21)	3.00	(20)	(21)
U. of Colorado-Denver	11.50	(12)	0.00	(36.5)	(22)
Governors State U.	15.00	(19)	3.00	(22)	(23)
U. of Wisconsin-Oshkosh	2.00	(37)	5.00	(16)	(24)
Bradley U.	4.00	(16)	0.00	(36.5)	(25)

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Table 3

Productivity Ranking Based on First-Authored Graduate Student Publication in 13 ACA Journals

Institution	Graduate Student Publications	Rank
U. of Maryland	9	(1)
U. of Iowa	8	(2)
North Carolina State U.	7	(3)
U. of Florida	5	(4)
U. of North Carolina-Greensboro	4	(5.5)
U. of British Columbia	4	(5.5)
Southern Illinois U.-Carbondale	3	(7.5)
George Washington U.	3	(7.5)
U. of North Carolina-Chapel Hill	2	(11)
U. of Georgia	2	(11)
Kent State U.	2	(11)
Western Illinois U.[a]	2	(11)
U. of Akron	2	(11)
U. of Wyoming	1	(18.5)
U. of Oregon	1	(18.5)
U. of Alabama-Tuscaloosa	1	(18.5)
Ohio U.	1	(18.5)
Idaho State U.	1	(18.5)
U. of Tennessee-Knoxville	1	(18.5)
Mississippi State U.	1	(18.5)
U. of South Carolina-Columbia	1	(18.5)
Georgia State U.	1	(18.5)
Illinois State U.[a]	1	(18.5)

[a]Master's level programs.